Welcome!

We greatly appreciate your purchase of the TNP500/502 Universal Tilt 'N Plug Interconnect Box. We are sure you will find it reliable and simple to use. Superior performance for the right price, backed by solid technical and customer support is what ALTINEX has to offer.

We are committed to providing our customers with Signal Management Solutions® to the most demanding audiovisual installations at competitive pricing and we welcome you to join the ranks of our many satisfied customers throughout the world.

1. Precautions and Safety Warnings

Please read this manual carefully before using your TNP500/502 and keep it handy for future reference. These safety instructions are to ensure the long life of your TNP500/502 and to prevent fire and shock hazards. Please read them carefully and heed all warnings.

1.1 General

- There are no user serviceable parts inside. Qualified ALTINEX service personnel must perform all service on the TNP.

1.2 Installation Precautions

- To prevent fire or shock, do not expose this unit to water or moisture. Do not place the TNP500/502 in direct sunlight, near heaters, or heat-radiating appliances, or near any liquid. Exposure to direct sunlight, smoke, or steam can harm internal components.
- Handle the TNP carefully. Dropping or jarring can cause damage.
- Do not force or pull any cable or power cord attached to the TNP.
- Do not place heavy objects on top of the TNP500/502.
- Do not use excessive force to push down on the top of the unit.
- Never place fingers inside the opening on each side of the unit. This action could cause injury due to sharp edges inside the unit.
- To turn off the main power, disconnect the power cord which powers the socket on the pop-up panel. The power outlet socket should be installed near to the equipment, and be easily accessible.
- We recommend using wall outlets with a Ground Fault Circuit Interrupter (GFCI) for maximum protection.

1.3 Cleaning

- Clean only with a dry cloth. Never use strong detergents or solvents such as alcohol or thinner.

1.4 FCC Notice

- This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
- This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions found herein, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.
- Any changes or modifications to the unit not expressly approved by ALTINEX, Inc. could void the user's authority to operate the equipment.

2. Installation Procedures

Step 1. Cut an opening into the table's surface. Refer to diagram on ALTINEX web site www.altinex.com for table cutout requirements.

Note: The tabletop must be 2.5 inches or less in thickness. Always confirm dimensions before cutting to insure specifications have not changed.

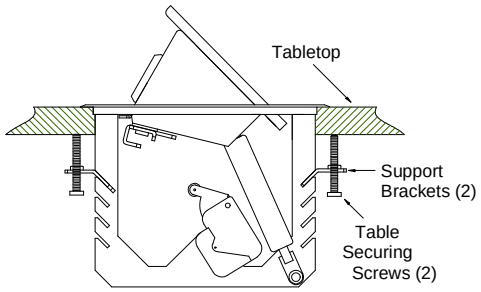
Step 2. Insert the unit into the opening.

Step 3. Place the 2 support brackets under the table and place them between the support mount grooves on each side of the unit. Attach the brackets to the groove at the desired height and secure them to the bottom of the table using the screws provided. See Diagram 4.

Step 4. Attach the power cord to the table using the cable clamps provided. Keep a service loop under the table to allow the unit to "pop up". Exercise the unit several times while adjusting the cable placement. Tighten the clamps when the unit "pops up" smoothly.

Step 5. Connect the remaining cables under the table to their mating destinations using a service loop as described above for the power cable.

Note: There are 2 RCA audio connectors on the front panel of the TNP502. The black connector is known as audio left and the red is for audio right.



Step 6. To raise the TNP500/502 into position, push down on the top of the unit. To lower the unit, push down on the top of the unit until the latching mechanism is engaged.

3. Limited Warranty/Return Policies

Please see the ALTINEX website at www.altinex.com for details on warranty and return policies.

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4. Technical Specifications

Specifications are subject to change. See www.altinex.com for up-to-date information.

Features/Description	TNP502
Pass-Through	
AC Power	10 ft (3 m)
110 VAC	NEMA F-M (2 F to 1 M)
Audio/video	6 ft (2 m)
Computer Video	15-pin HD F-M (1)
Network	RJ-45 F-M (1)
Modem	RJ-11 F-M (1)
S-Video	4-pin Mini DIN F-M (1)
Composite Video	Yellow RCA F-F (1)
Control	DB-9 F-M (1)
Audio, Stereo	3.5 mm F-M (1)
Audio Left Channel	Red RCA F-F (1)
Audio Right Channel	Black RCA F-F (1)
Compatibility	
Tilt 'N Plugs	TNP500
Accessories Included	
Miscellaneous	Mounting hardware

Table 1. TNP502 General

Mechanical	TNP500/502
Maximum Table Thickness	2.5 in (64 mm)
Finish	Flat Black
Height Above the Surface	3.5 in (88 mm)
Height Below the Surface	4.0 in (101 mm)
Width	7.9 in (200 mm)
Depth	6.5 in (166 mm)
TNP500	
Weight	2.5 lb (1.1 kg)
Weight, Shipping (approx.)	3.8 lb (1.7 kg)
TNP502	
Weight	4.0 lb (1.8 kg)
Weight, Shipping (approx.)	5.6 lb (2.5 kg)
T° Operating	10°C-45°C
T° Maximum	60°C
Humidity	90% non-condensing

Table 2. TNP500/502 Mechanical

Electrical	TNP502
Power	
Power Rating (pass-through power)	90-140 VAC, 5 A max.

Table 3. TNP502 Electrical

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5. About Your TNP500/502

The TNP500 is designed for installation into a table in a presentation or boardroom. The Tilt `N Plug Configurable Tabletop Interconnect Box provides access to multimedia input connections when needed, and hides them when not needed. This unit can be configured with a wide variety of data or A/V connectors.

Using a tilting angular construction with pneumatic lift assist and mechanical latch, the TNP500 can be "tilted up" into a raised position for access to input plates, or lowered flush into the table when not in use. Only light pressure is required to unlatch the top to open it, and slightly more pressure to push the lid down and close the unit.

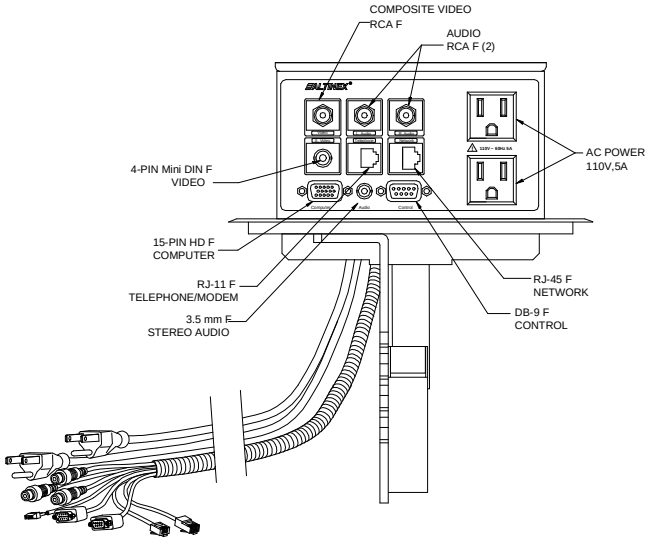
The TNP500 provides slots for 6 single-slot sectional plates on the exposed faceplate. Signals are passed through the unit to the underside of the table via cables with mating connectors on the opposite end. For example, an RJ-45 F connector on the sectional plate would be terminated in an RJ-45 M connector at the opposite end of a 6 ft (2 m) cable. Many sectional plate configurations are available and ordered separately. See our website for complete details.

The TNP502 is a "package" that covers the basic needs of many Tilt 'N Plug users. This unit ships as a completely assembled product made up of one TNP500 and one SP3500SC Sectional Plate. The input labels are already engraved and ready to go.

The SP3500SC includes the following connectors: 2 standard U.S. power receptacles, computer video (15-pin HD), COM Port/RS-232 (9-pin D), composite video (RCA), S Video (4-pin mini DIN), audio (2-RCAs), computer audio (3.5 mm), modem (RJ-11), and network (RJ-45) input connectors. All signal connectors have 6 ft (2 m) cables attached that feed through to the bottom of the unit. The connectors and their labels may be customized for a fee.

TNP500

TNP502



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6. Application Diagrams

Diagram 1: Typical Setup

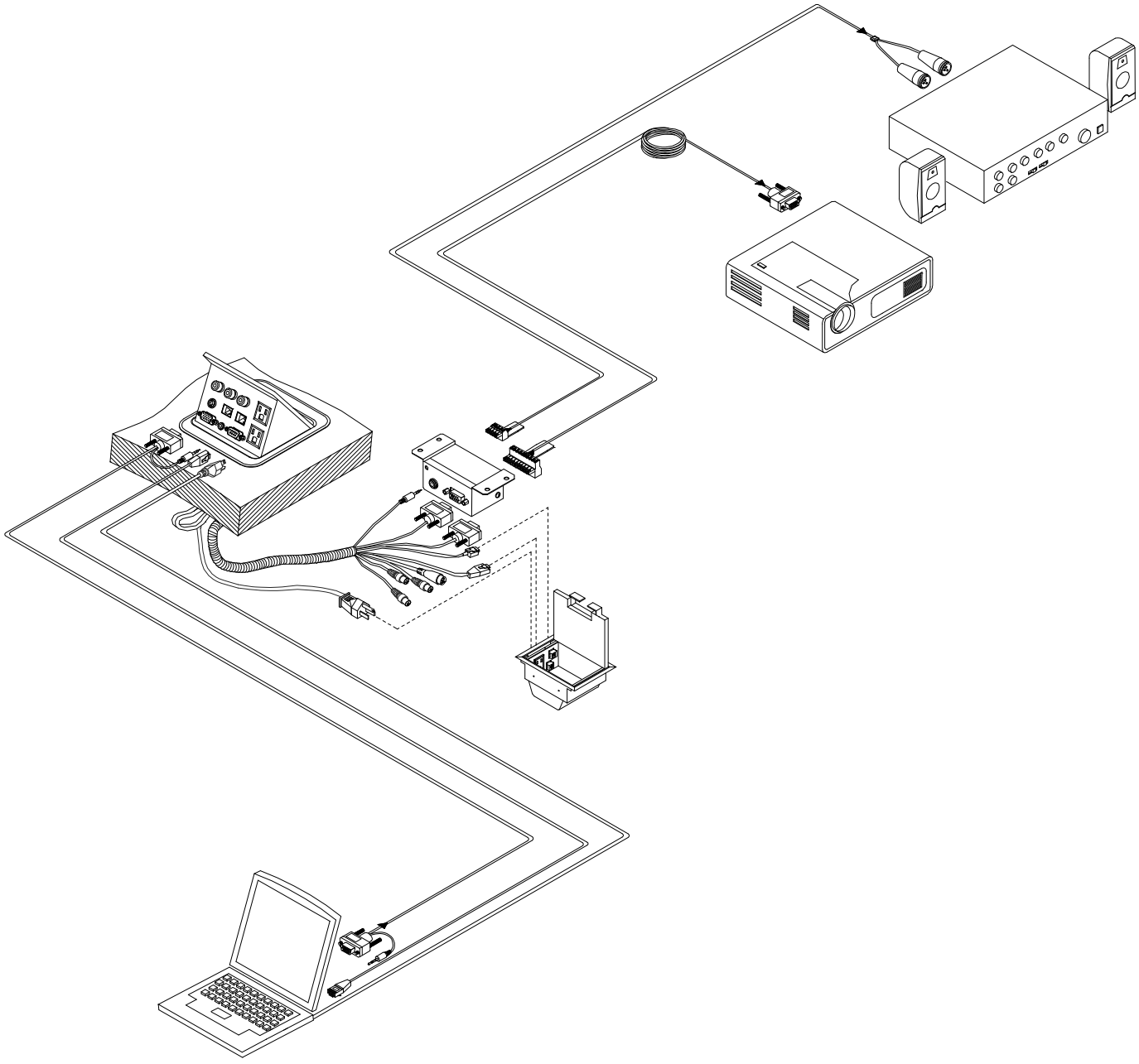

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Diagram 2: Dimensions

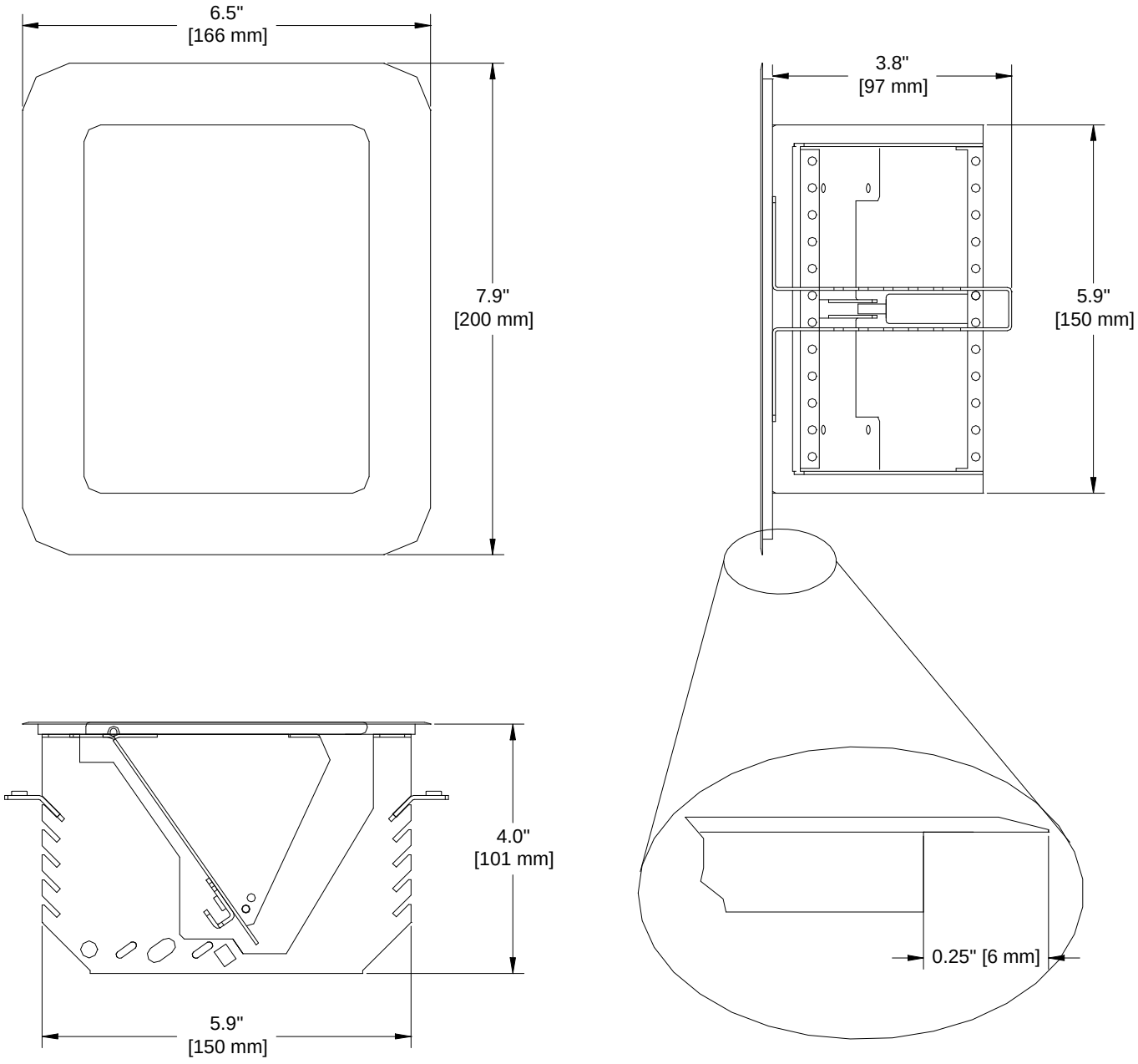

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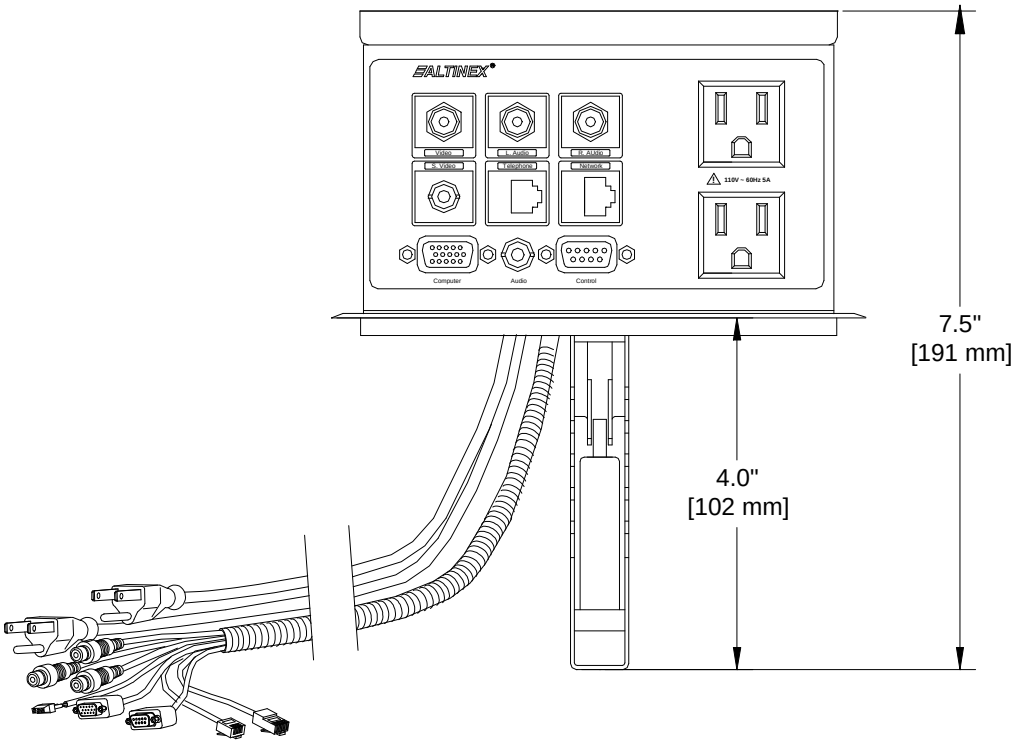
Diagram 3: Dimensions Open



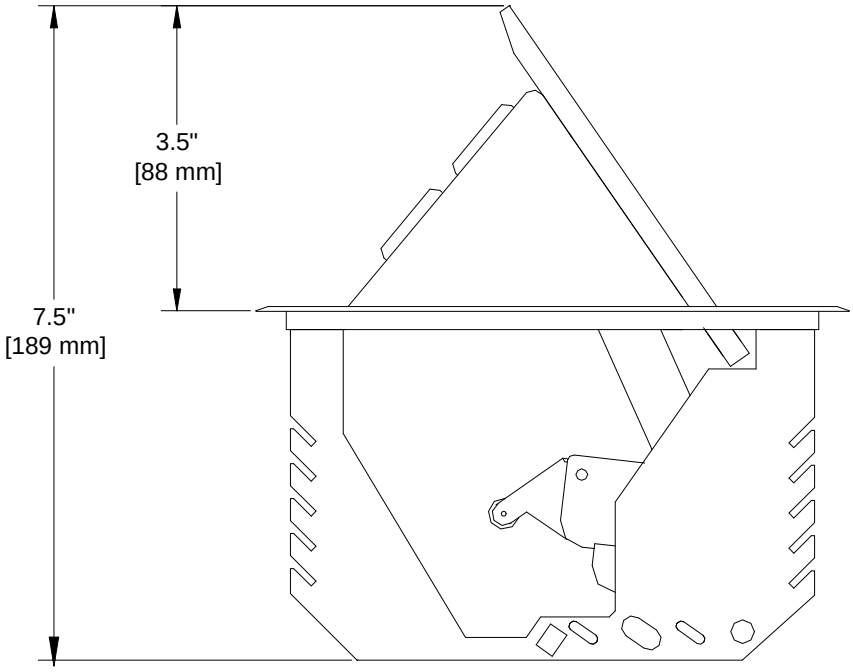


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Diagram 4: Mounting

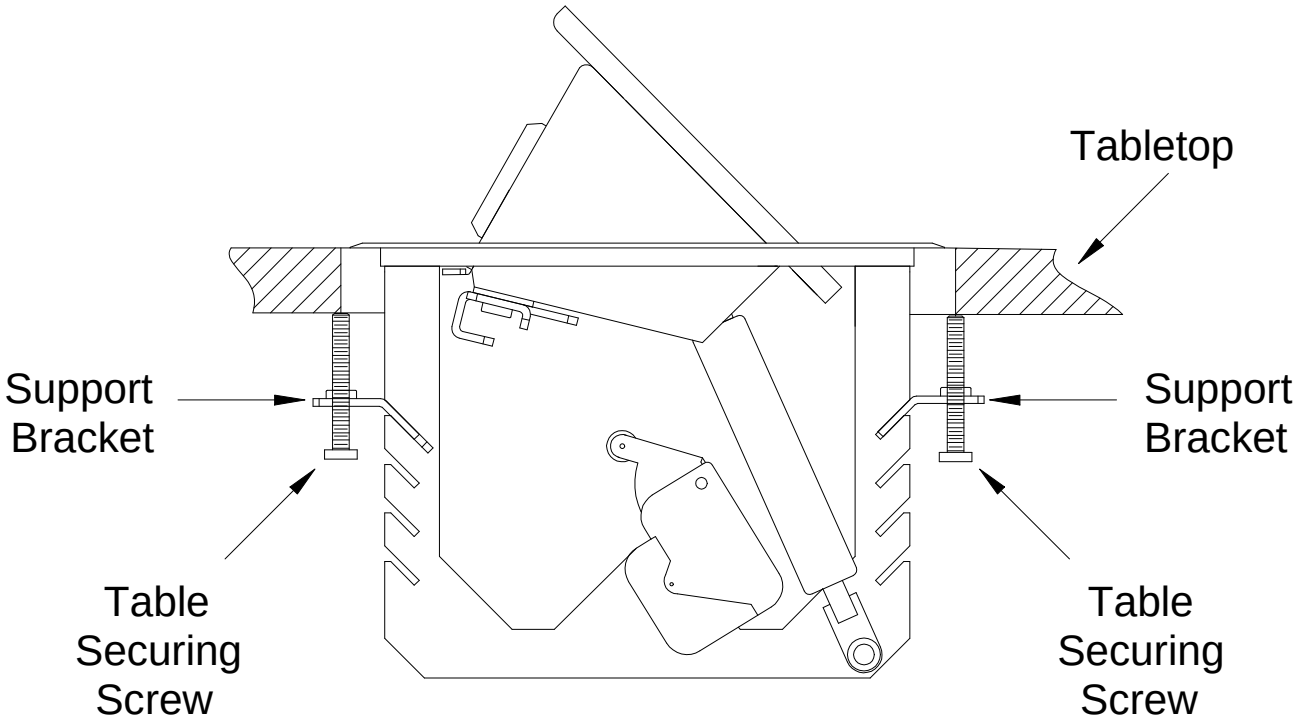

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Diagram 5: Popular Section Plates

1 SLOT PLATES

2 SLOT PLATES

3 SLOT PLATES

STANDARD PLATES
6 SLOTS

Many different plates can be installed on the TNP500 using up to 6 slots total. In addition to standard plates, custom plates can be made using blank plates available. For a complete listing and detailed descriptions, see the ALTINEX web site at www.altinex.com.

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Diagram 6: TNP502 Configuration

Diagram 7: TNP502 Installed

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7. Operation

7.1 Opening and Closing the TNP500/502

The TNP will open easily when the top is pressed down and then released.

When the TNP is not in use, simply press the top down until it is level with the surface of the table and then release. The unit will remain hidden until needed again.

7.2 Power/Signal Connections

Connect external devices to the appropriate connector on the TNP. Remember, the devices plugged into the AC power connectors should not draw more than 5A AC.

8. Troubleshooting Guide

The TNP500/502 unit supplied was carefully tested and no problems were detected. However, we would like to offer the following suggestions:

8.1 Bad Signal

- Make sure that no cable or power cord is damaged or pinched. If there has been damage to the unit, do not use the TNP. Please contact ALTINEX at (714) 990-2300 to have the unit repaired.
- Please make sure that the highest quality video, audio, network, and telephone cables or connectors are used.
- If unit does not lift properly, please check the wear and tear on the gas spring. If replacement of the gas spring is required, contact ALTINEX at (714) 990-2300.

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